

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/39593

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) : G06F 19/00

US CL : 702/19

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U S 702/19, 435/6, 7 I

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Continuation Sheet

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/0124552 A1 (LINDEMANN et al.), 03 July 2003 (03.07.2003), see especially Detailed Description of the Invention Including Preferred Embodiments Thereof.	1-27
Y	US 6,132,969 A (STOUGHTON et al.) 17 October 2000 (17.10.2000), see especially Detailed Description.	1-27
X	US 2003/0154032 A1 (PITTMAN et al.) 14 August 2003 (14.08.2003), see especially Detailed Description of the Invention.	1-4
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Y		5-27
Y	US 2003/0028327 A1 (BRUNNER et al.) 06 February 2003 (06.02.2003), see especially Detailed Description of the Invention.	1-27



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents		"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E"	earlier application or patent published on or after the international filing date	"Y"	document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L"	document which may throw doubt on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search

06 February 2006 (06.02.2006)

Date of mailing of the international search report

03 MAR 2006

Name and mailing address of the ISA/US

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## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically."
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:  
Please See Continuation Sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
  2. ☐ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of any additional fees.
  3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-27
- Remark on Protest ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

**BOX III. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING**

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claim(s) 1-27, drawn to a method of predicting at least one toxic effect of a test agent.

Group II, claim(s) 28, drawn to a method of providing a report.

Group III, claim(s) 29-54, drawn to a method for creating a toxicology model.

Group IV, claim(s) 55, drawn to a computer readable medium comprising a data structure.

The inventions listed as Groups H V do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Group I is directed to a method of predicting at least one toxic effect of a test agent. Group II is directed to a method of providing a report. Group III is directed to a method for creating a toxicology model. Group IV is directed to a computer readable medium comprising a data structure.

It is noted that claim 1 includes predicting a toxic effect of a test agent. The attached abstract by Hasegawa (Gan To Kagaku Ryoho, 2003 March, Volume 30(3): pages 325-333) discloses performing pharmacokinetic and pharmacodynamic analyses to measure and observe drug effects as well as genomic analysis to predict toxicity among individuals. This illustrates that predicting toxic effects is not a special technical feature and thus supports the breaking of unity in this application.

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Continuation of B. FIELDS SEARCHED Item 3:

WEST, PUBMED, EMBASE, MEDLINE, SCISEARCH, BIOSIS searching: toxic, predict, hybridization, expression, gene, score, agent, expose, model, robust multiarray average, quality control, remote, server